



National Transportation Safety Board Aviation Accident Final Report

Location:	BISMARCK, ND	Accident Number:	CHI00LA246
Date & Time:	08/06/2000, 1720 CDT	Registration:	N131DS
Aircraft:	Summers RV4	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Minor
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The airplane nosed over during a forced landing. The pilot reported that a loss of engine power occurred after he was cleared to land. He reported he was too far from the runway, so he selected a gravel road on which to make the forced landing. The gravel road dead-ended at an intersection with a paved road. The airplane traveled off the end of the gravel road, crossed the paved road, and contacted a drainage ditch where it nosed over. The pilot reported that the loss of engine power was a result of fuel exhaustion and the accident could have been prevented had he landed earlier for fuel.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: Inadequate preflight planning/preparation by the pilot, which resulted in fuel exhaustion. A factor associated with the accident was the drainage ditch that the airplane contacted.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL

Phase of Operation: CRUISE

Findings

1. FLUID,FUEL - EXHAUSTION

2. (C) PREFLIGHT PLANNING/PREPARATION - INADEQUATE - PILOT IN COMMAND

Occurrence #2: FORCED LANDING

Phase of Operation: EMERGENCY DESCENT/LANDING

Occurrence #3: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER

Phase of Operation: LANDING - ROLL

Findings

3. (F) TERRAIN CONDITION - DITCH

Occurrence #4: NOSE OVER

Phase of Operation: LANDING - ROLL

Factual Information

On August 6, 2000, at 1720 central daylight time, a Summers RV4, N131DS, nosed over during a forced landing three miles east of the Bismarck Municipal Airport, Bismarck, North Dakota. The private pilot reported the forced landing was a result of a total loss of engine power. The pilot received minor injuries and the airplane was substantially damaged. The 14 CFR Part 91 personal flight was operating in visual meteorological conditions without a flight plan. The cross-country flight originated from Stevens Point, Wisconsin, exact time unknown.

The pilot reported he departed Stevens Point, Wisconsin, with 32 gallons of fuel on board. He stated he arrived in the Bismarck area and was cleared to land on runway 31. He reported the engine lost power and he was too far from the airport to make it to the runway. He selected a gravel road on which to make the forced landing. The gravel road dead-ended at an intersection with a paved road. The airplane traveled off the end of the gravel road, crossed the paved road, and contacted a drainage ditch where it nosed over.

The pilot reported that the loss of engine power was a result of fuel exhaustion. The pilot completed a NTSB Form 6120.1/2. The pilot reported on the form that landing earlier for fuel could have prevented the accident.

Pilot Information

Certificate:	Private	Age:	, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	10/08/1998
Occupational Pilot:	Last Flight Review or Equivalent:		
Flight Time:	740 hours (Total, all aircraft), 82 hours (Total, this make and model), 712 hours (Pilot In Command, all aircraft), 24 hours (Last 90 days, all aircraft), 20 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Summers	Registration:	N131DS
Model/Series:	RV4 RV4	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental	Serial Number:	2977
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	06/01/2000, Annual	Certified Max Gross Wt.:	1600 lbs
Time Since Last Inspection:	24 Hours	Engines:	1 Reciprocating
Airframe Total Time:	82 Hours	Engine Manufacturer:	Lycoming
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-320-D1A
Registered Owner:	DONALD C. SUMMERS	Rated Power:	160 hp
Operator:	DONALD C. SUMMERS	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	BIS, 1678 ft msl	Distance from Accident Site:	3 Nautical Miles
Observation Time:	1752 CDT	Direction from Accident Site:	90°
Lowest Cloud Condition:	Scattered / 9000 ft agl	Visibility	10 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	120°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	25° C / 19° C
Precipitation and Obscuration:			
Departure Point:	STEVENS POINT, WI (STE)	Type of Flight Plan Filed:	None
Destination:	(BIS)	Type of Clearance:	VFR
Departure Time:	0000	Type of Airspace:	Class D

Airport Information

Airport:	BISMARCK MUNICIPAL (BIS)	Runway Surface Type:	
Airport Elevation:	1678 ft	Runway Surface Condition:	Rough
Runway Used:	0	IFR Approach:	
Runway Length/Width:		VFR Approach/Landing:	Forced Landing

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	PAMELA S SULLIVAN	Report Date:	05/18/2001
Additional Participating Persons:	RICHARD KABANUCK; FARGO, ND		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinquiry@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).